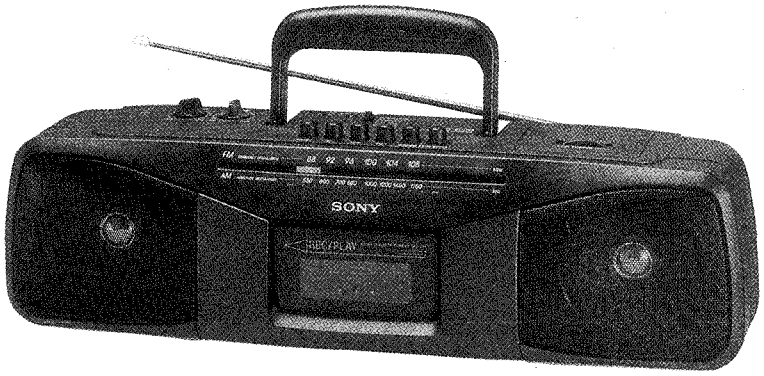
CFS-204

SERVICE MANUAL

AEP Model



Model Name Using Similar Mechanism	CFS-W304
Tape Trasport Mechanism Type	MF-204-64

SPECIFICATIONS

Frequency range

	FM	AM
AEP model	87.6−107MHz	531−1,602kHz
Italian model	87.5−108MHz	526.5−1,606.5kHz

Recording system: 4-track 2-channel stereo
Frequency response: 80Hz−8,000Hz
Speakers: Full-range: 10cm (4 inches) dia.×2
Power output: 2.3W+2.3W (at 10% harmonic distortion) at DC operation
Output: Headphones jack (stereo minijack), 16-68 ohm impedance

Power requirements: 220V AC, 50Hz
9V DC, six R14 (size C) batteries
Power consumption: 14W

Battery life

Batteries	FM recording
Sony SUM-2 (NS)	Approx. 4 hours
Sony AM2 alkaline	Approx. 8 hours

Dimensions: Approx. 460×145×160mm (w/h/d) ($18^{1}/_{8}\times5^{3}/_{4}\times6^{3}/_{8}$ inches) incl. projecting parts and controls
Weight: Approx. 2.4kg (5 lb 5 oz), incl. batteries
Accessory supplied: AC power cord (1)

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MICROFILM

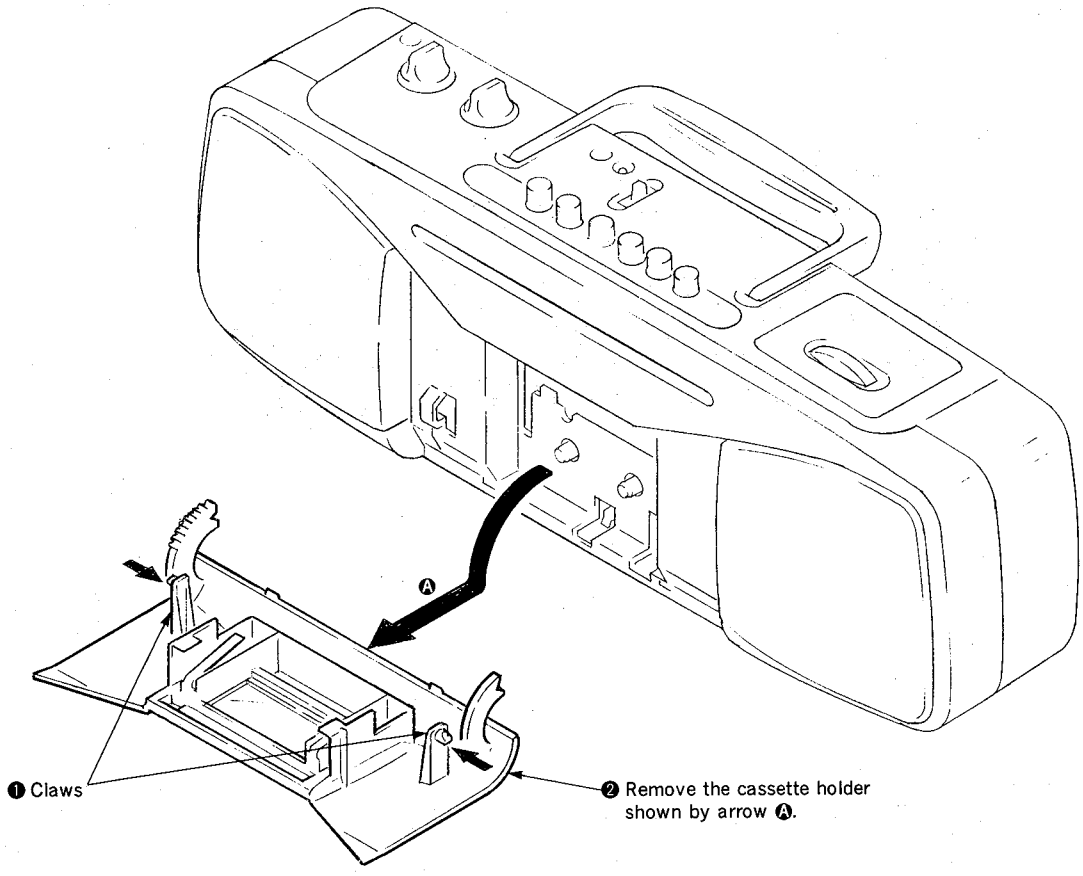
RADIO CASSETTE-CORDER

SONY®

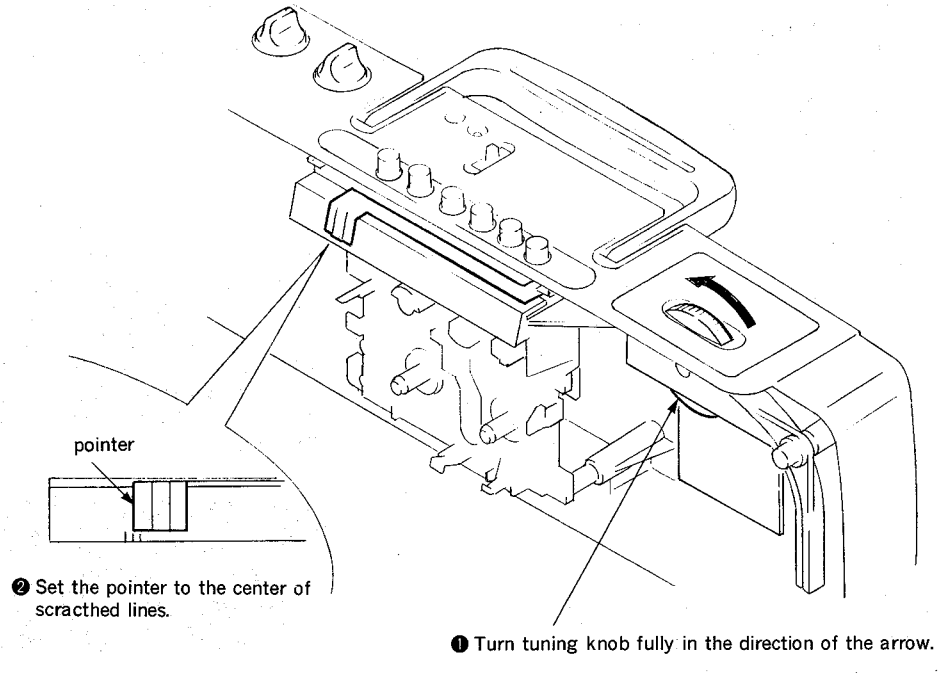
SECTION 1
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

1-1. REMOVAL OF CASSETTE HOLDER



1-2. DIAL POINTER SETTING



SECTION 2
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head — pinch roller
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be perfomed with the rated power supply voltage unless otherwise noted.
6. Power supply voltage: 9V dc.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	20−60g•cm (0.28−0.83 oz•inch)
Forward back tension	CQ-102C	2−6g•cm (0.028−0.083 oz•inch)
Fast Forward	CQ-201B	more than 45g•cm (more than 0.62 oz•inch)
Rewind	CQ-201B	more than 45g•cm (more than 0.62 oz•inch)

Tape Tension Measurement

Mode	Meter	Meter Reading
Forward	CQ-403A	more than 70g (more than 2.47 oz)
Reverse	CQ-403R	

SECTION 3
ELECTRICAL ADJUSTMENTS

3-1. TAPE RECORDER SECTION

Standard Output Level

Output terminal	SP OUT	HP OUT
load impedance	3.2Ω	32Ω
output signal level	0.775V (0dB)	0.25V (−10dB)

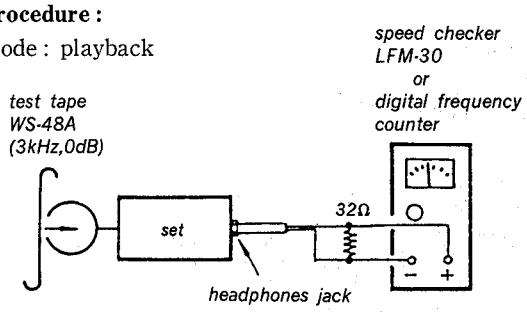
Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	tape speed adjustment

Tape Speed Adjustment

Procedure:

Mode: playback

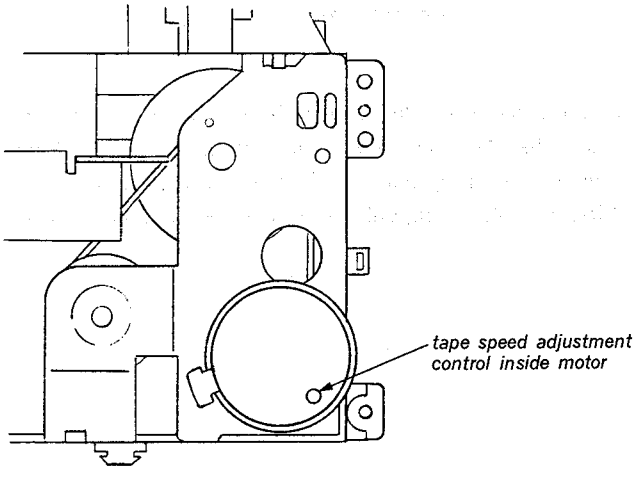


Adjustment Value:

Speed checker	Digital frequency counter
±2.5%	2,925 to 3,075Hz

Frequency difference between the beginning and the end of the tape should be within 1% (30Hz).

Adjustment Location:

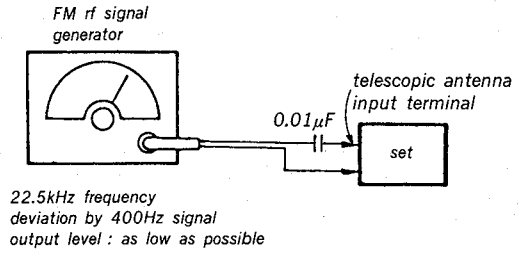


3-2. RADIO SECTION

• FM Section

Setting :

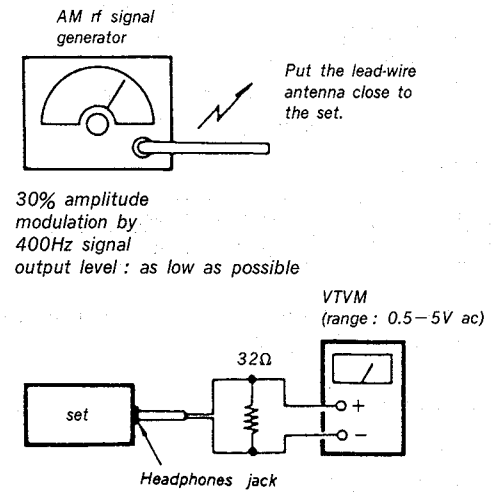
FUNCTION switch : FM


FM rf signal generator
telescopic antenna input terminal
0.01μF
set
22.5kHz frequency deviation by 400Hz signal output level : as low as possible

• AM Section

Setting :

FUNCTION switch : AM


AM rf signal generator
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400Hz signal output level : as low as possible
VTVM (range : 0.5—5V ac)
32Ω
set
+
−
Headphones jack

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.
- Remove telescopic antenna in FM section adjustments.

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2	CT2
AEP : 87.6MHz IT : 87.35MHz	AEP : 107.0MHz IT : 108.3MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L1	CT1
AEP : 87.6MHz IT : 87.35MHz	AEP : 107.0MHz IT : 108.3MHz

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	CT4
AEP : 520kHz IT : 516kHz	AEP : 1,680kHz IT : 1,630kHz

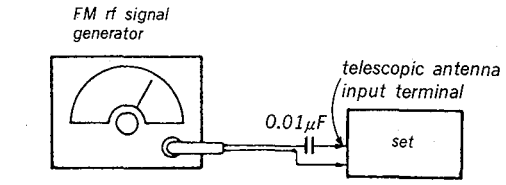
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	CT3
600kHz	1,400kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on VTVM.
T1
455kHz

• IT : Italian model

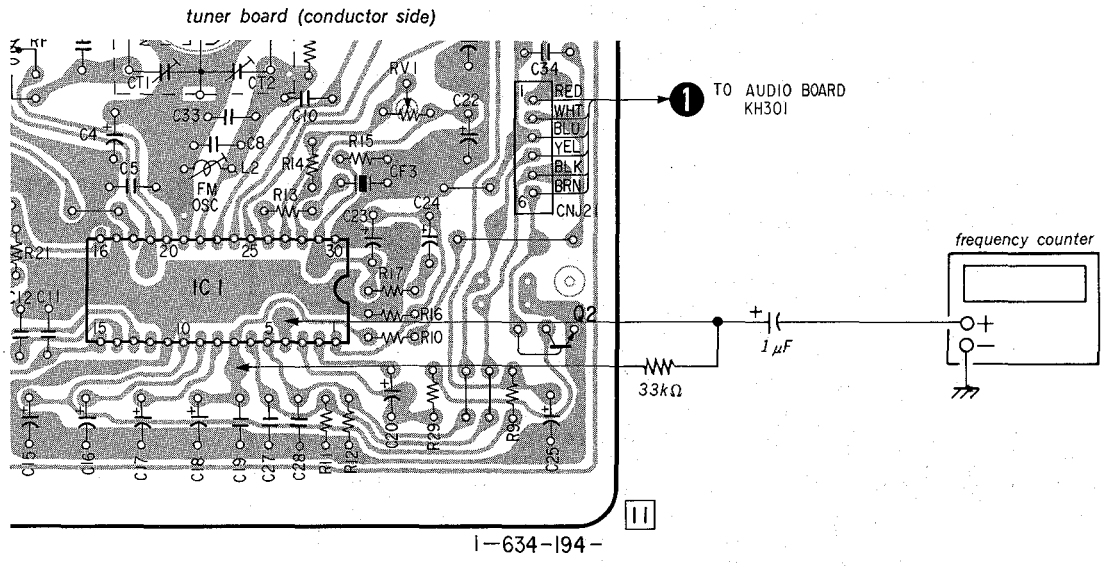
VCO Adjustment

Procedure :

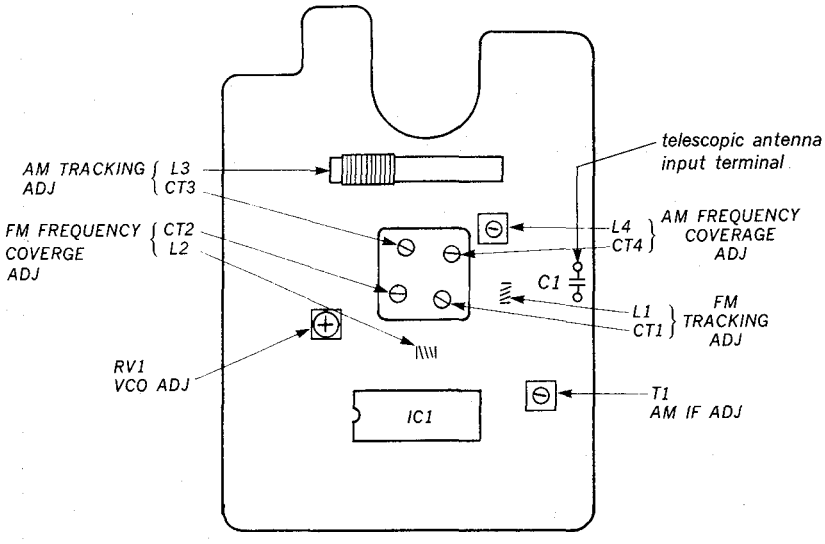


Carrier frequency : 98MHz
Modulation : no modulation
Output level : 0.1V (100dB)

1. Connect frequency counter as shown below.
2. Tune the set to 98MHz.
3. Adjust RV1 for 76kHz±500Hz reading on the frequency counter.

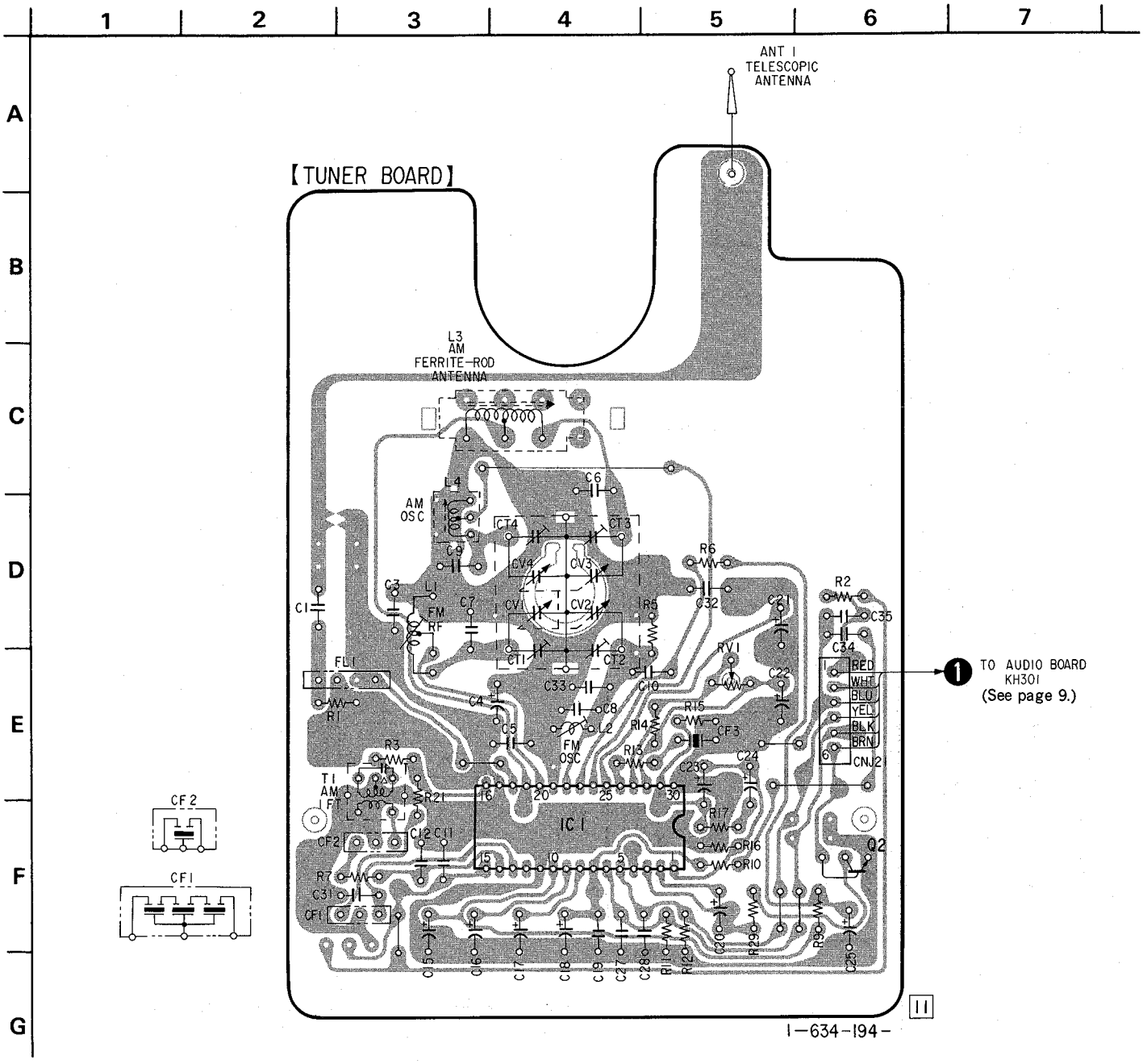


Adjustment Location : tuner board (component side)



SECTION 4
DIAGRAMS

4-1. PRINTED WIRING BOARD —TUNER SECTION—



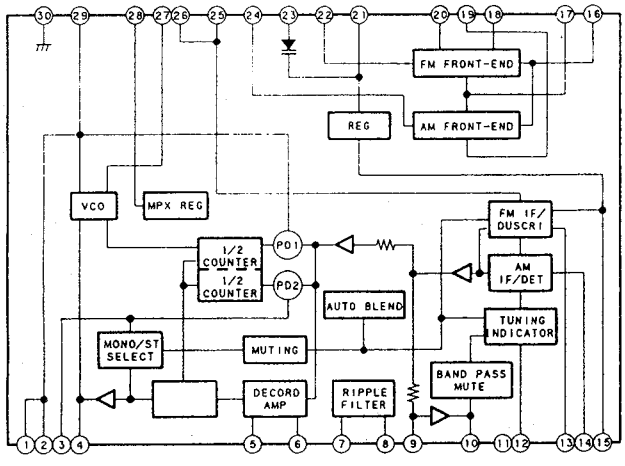
1 TO AUDIO BOARD KH301 (See page 9.)

Note:

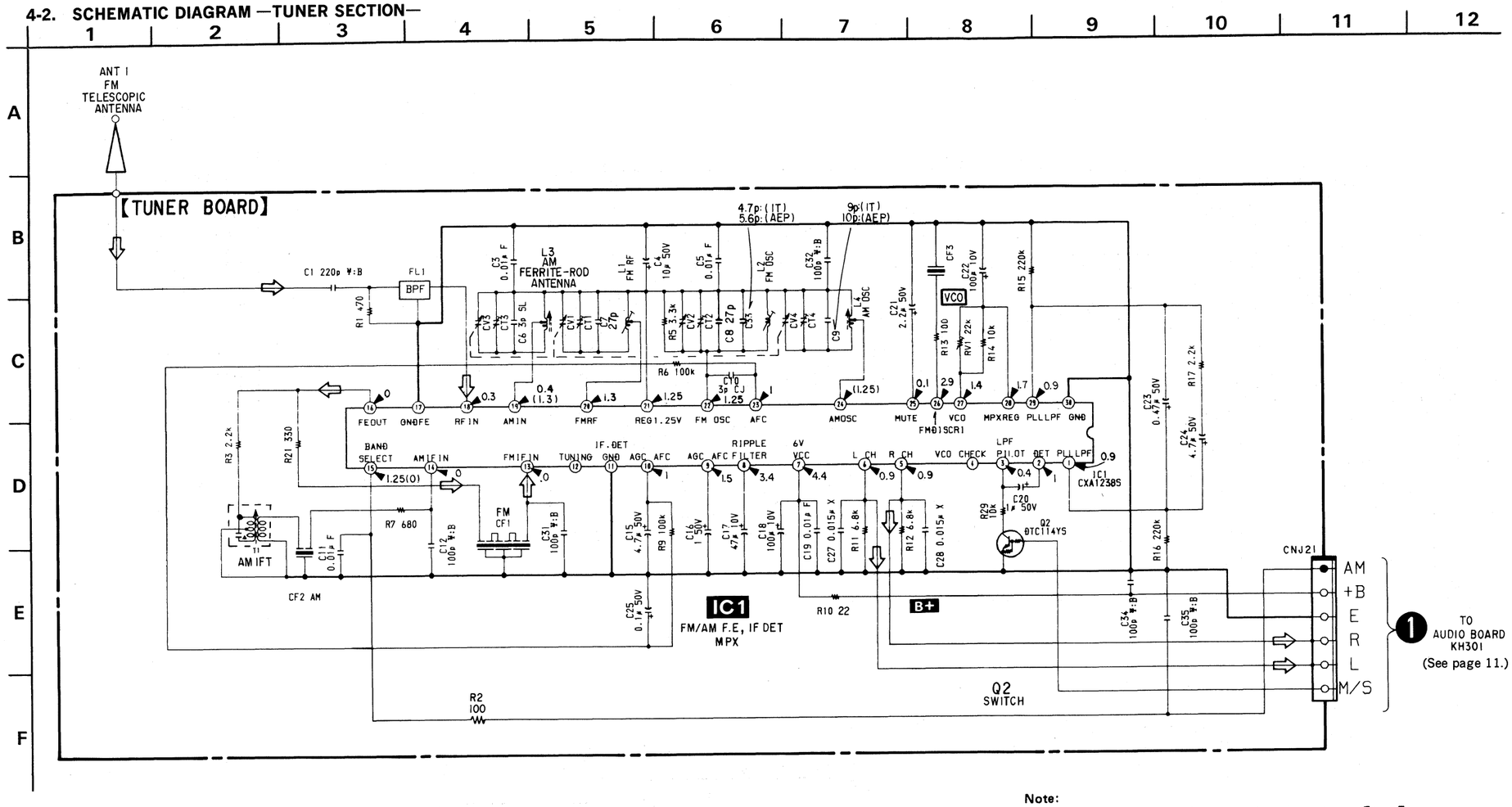
- ○—— : parts extracted from the component side.

• IC Block Diagram

IC1 CXA1238S



4-2. SCHEMATIC DIAGRAM —TUNER SECTION—

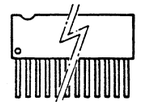


Note:

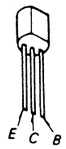
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- Power voltage is dc 9V and fed with regulated dc power supply from battery terminal.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- IT: Italian model

4-3. SEMICONDUCTOR LEAD LAYOUT

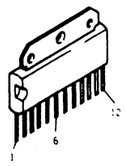
BA3420AL



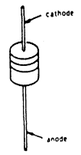
2SC1815-GR
2SC2001-K2



TA8207K

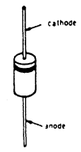


1SS119

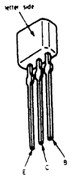


DTC114YS

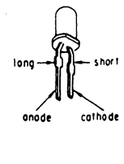
10E2



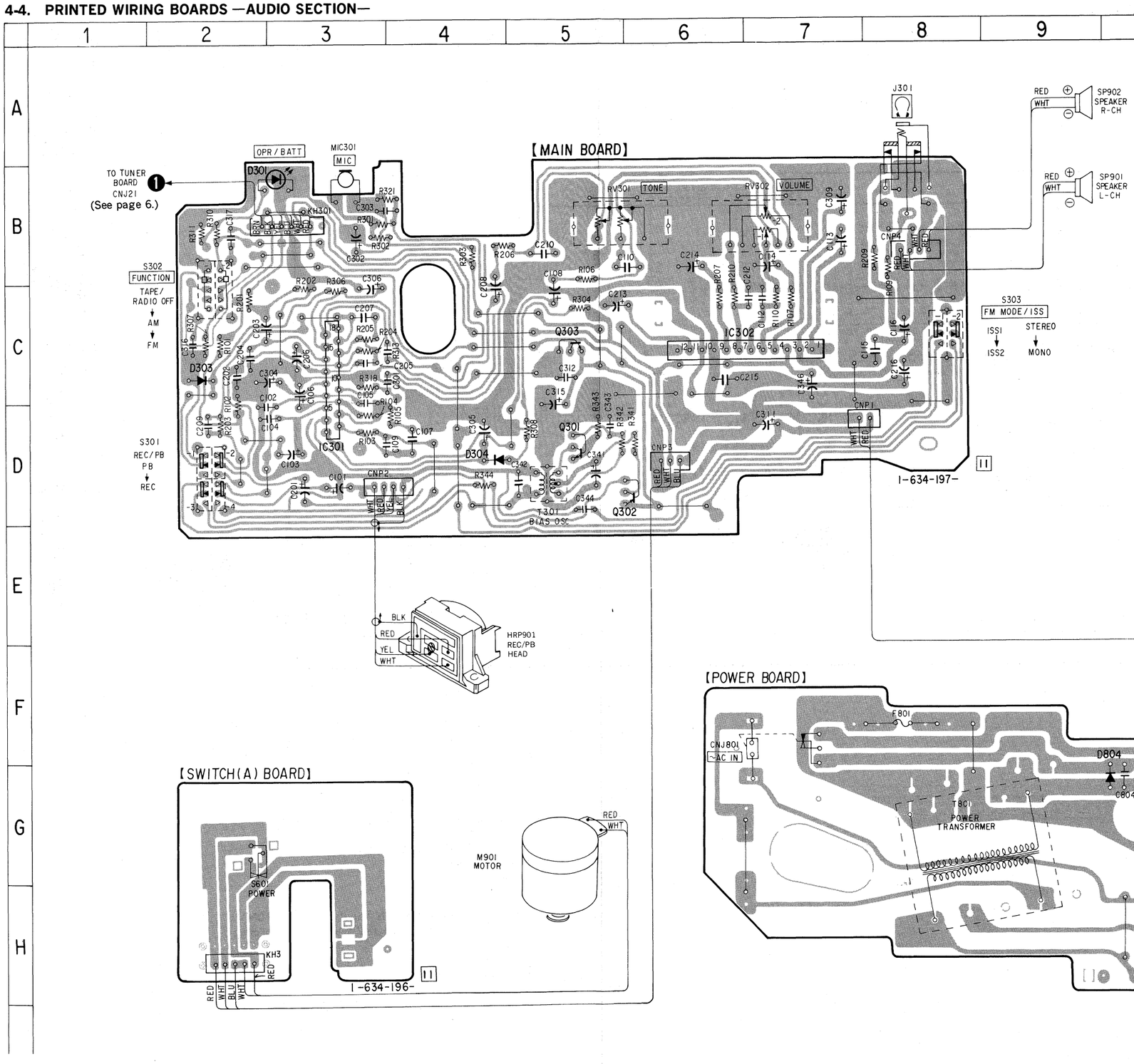
2SA1175-HFE



GL-3PR9



4-4. PRINTED WIRING BOARDS —AUDIO SECTION—

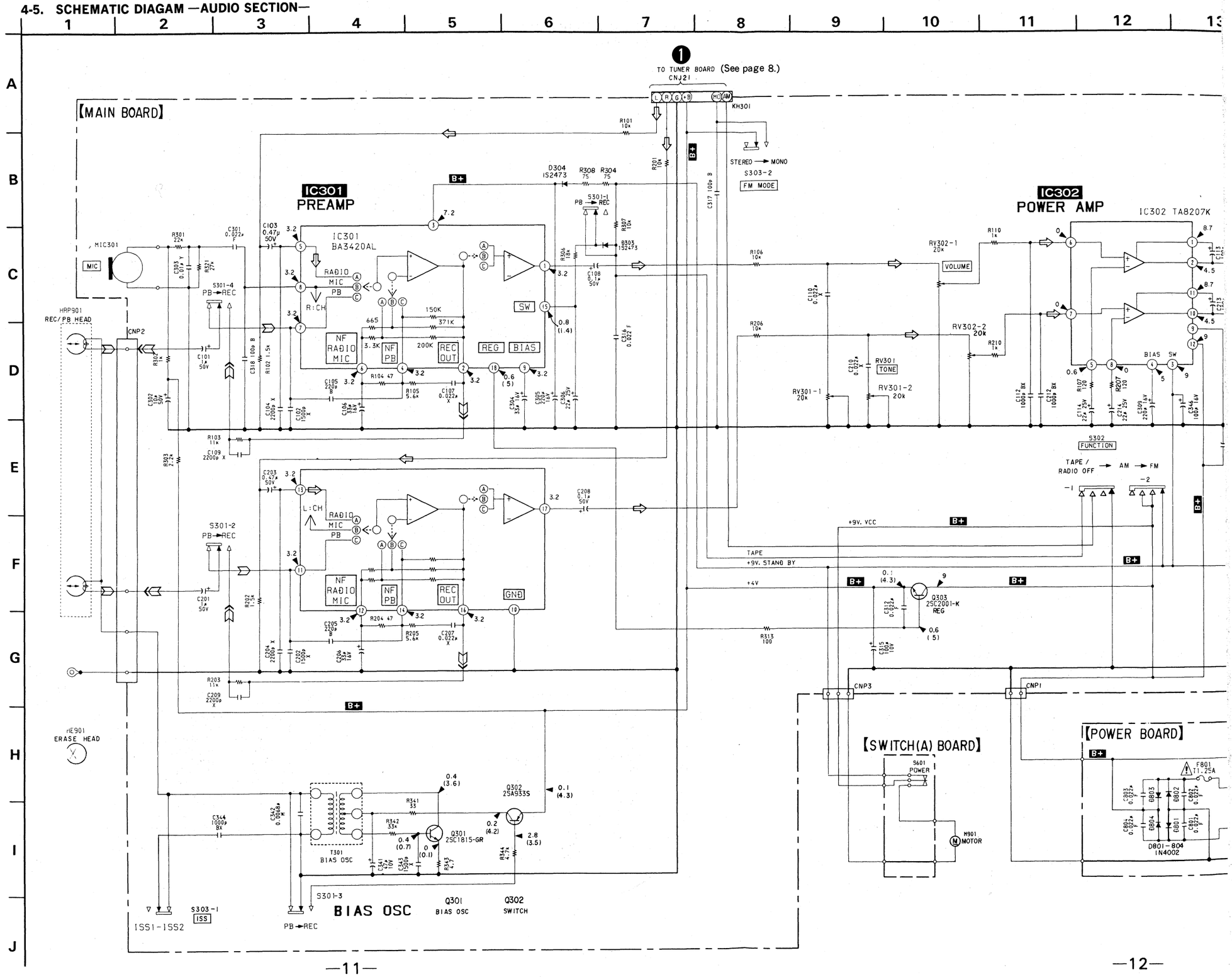


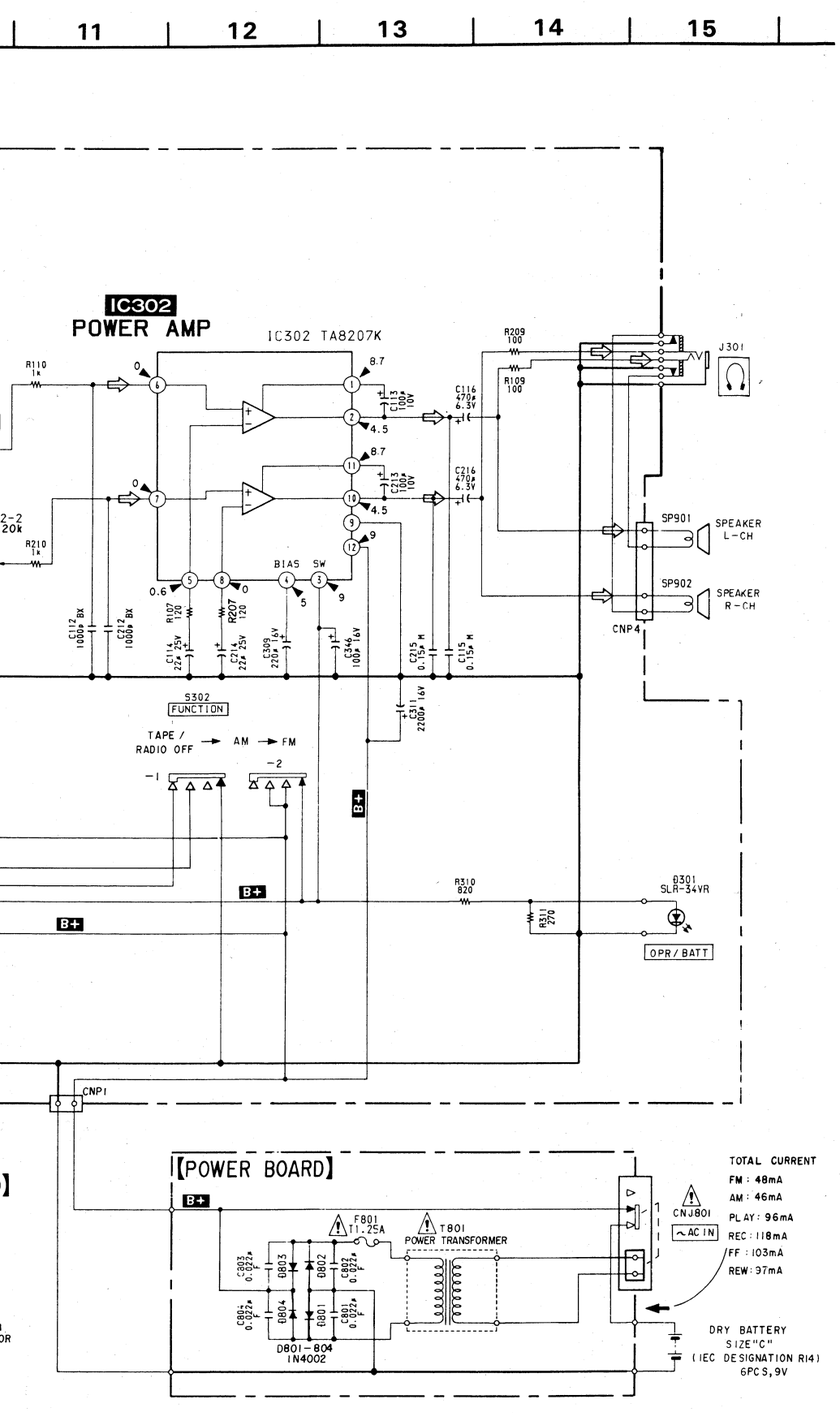
● Semiconductor Location

Ref. No.	Location
D301	B-3
D303	C-2
D304	D-4
D801	G-10
D802	G-10
D803	G-10
D804	G-10
IC301	C-3
IC302	C-6
Q301	D-5
Q302	D-6
Q303	C-5

● ○—— : parts extracted from the component side.

4-5. SCHEMATIC DIAGAM —AUDIO SECTION—





Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Power voltage is dc 9V and fed with regulated dc power supply from battery terminal.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : PLAY
  ( ) : REC
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⋙ : PB
  ⋙ : REC
- IT: Italian model

SECTION 5
EXPLODED VIEWS

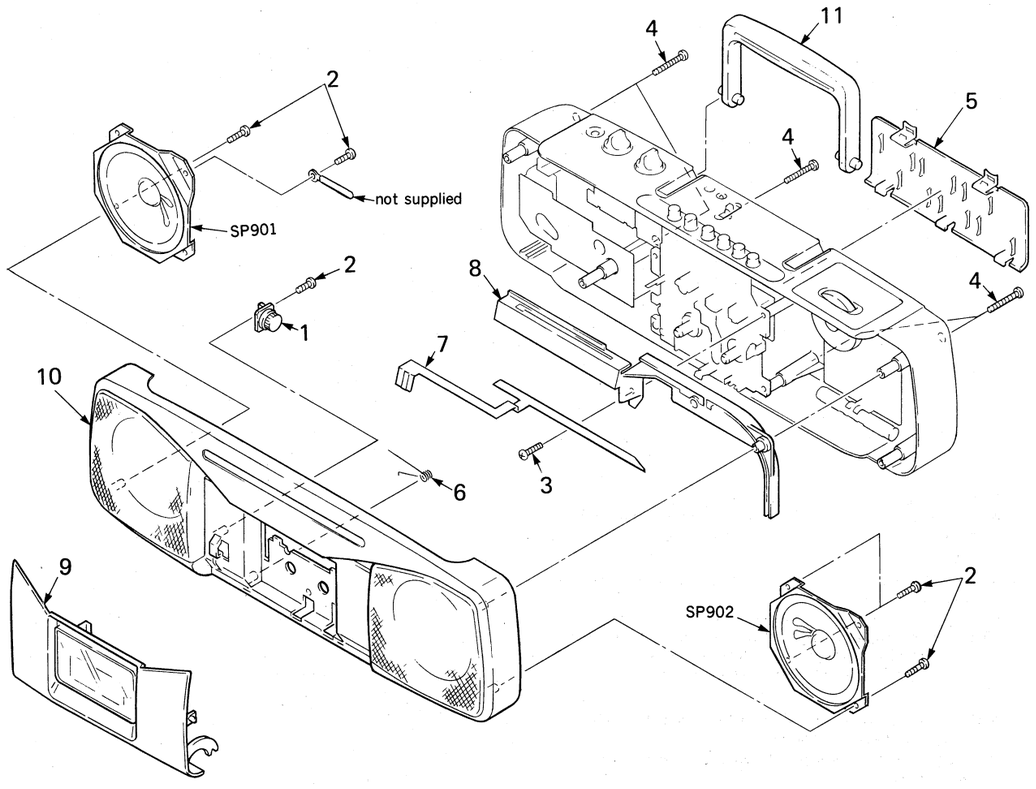
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

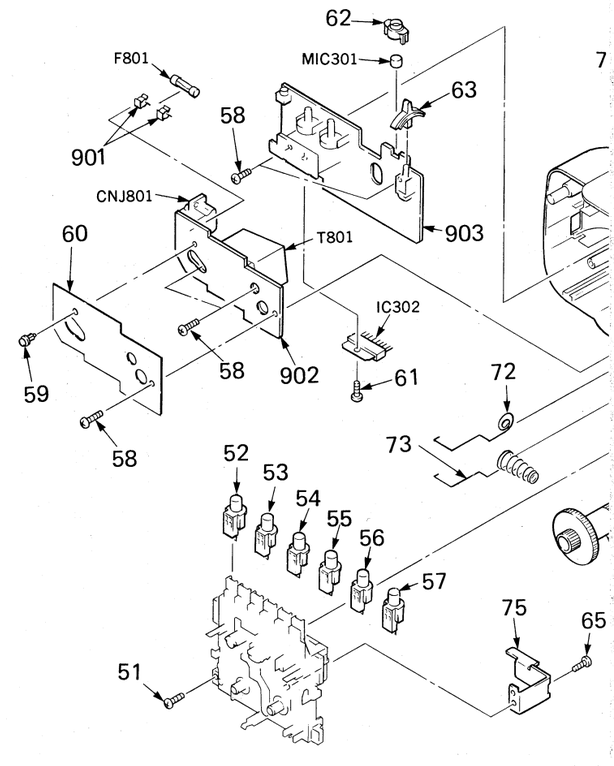
- IT: Italian model

5-1. FRONT CABINET



Ref.No	Part No.	Description	Remarks
1	3-351-377-11	DAMPER	
2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
3	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S	
4	7-685-153-19	SCREW +P 3X30 TYPE2 NON-SLIT	
5	3-357-521-01	(BLACK)....LID, BATTERY CASE	
5	3-357-521-11	(WHITE)....LID, BATTERY CASE	
5	3-357-521-21	(RED)....LID, BATTERY CASE	
6	3-356-172-01	SPRING (CASSETTE)	
7	3-356-164-01	POINTER	
8	3-356-165-01	CHASSIS (DIAL)	
9	X-3351-305-1	(BLACK)....HOLDER ASSY, CASSETTE	
9	X-3351-318-1	(RED)....HOLDER ASSY, CASSETTE	
9	X-3351-324-1	(WHITE)....HOLDER ASSY, CASSETTE	
10	X-3351-313-1	(IT : BLACK)....CABINET (FRONT) ASSY	
10	X-3351-314-1	(IT : RED)....CABINET (FRONT) ASSY	
10	X-3351-315-1	(AEP : BLACK)....CABINET (FRONT) ASSY	
10	X-3351-316-1	(AEP : WHITE)....CABINET (FRONT) ASSY	
10	X-3351-317-1	(AEP : RED)....CABINET (FRONT) ASSY	
11	X-3351-306-1	(BLACK)....HANDLE ASSY	
11	X-3351-319-1	(RED)....HANDLE ASSY	
11	X-3351-325-1	(WHITE)....HANDLE ASSY	
SP901	1-544-154-11	SPEAKER	
SP902	1-544-154-11	SPEAKER	

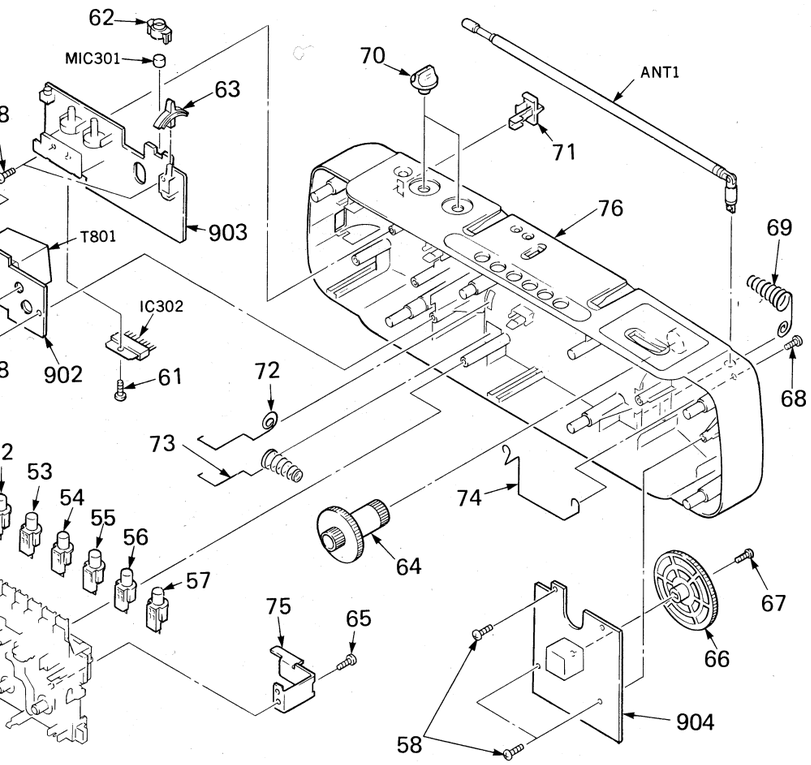
5-2. REAR CABINET



Ref.No	Part No.	Description	Remarks
51	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S	
52	3-357-527-01	BUTTON (PAUSE)	
53	3-357-528-01	BUTTON (FF)	
54	3-357-529-01	BUTTON (REW)	
55	3-357-530-01	BUTTON (PLAY)	
56	3-357-533-01	BUTTON (REC)	
57	3-357-532-01	BUTTON (S/E)	
58	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
59	4-812-134-00	RIVET NYLON, 3.5	
60	3-357-544-01	SHEET, INSULATING	
61	7-685-870-01	SCREW +BVTT 3X5 (S)	
62	3-321-122-01	CUSHION, MICROPHONE	
63	3-343-062-11	(WHITE)....KNOB (FUNCTION)	
63	3-343-062-21	(RED)....KNOB (FUNCTION)	
63	3-343-062-31	(BLACK)....KNOB (FUNCTION)	
64	3-357-525-01	KNOB (TUNING)	
65	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT	
66	3-338-505-01	DRUM, TUNING CAPACITOR	
67	7-621-770-87	SCREW +P 2.6X5	
68	7-682-548-09	SCREW +B 3X8	
69	3-357-541-01	SPRING (+−), BATTERY COIL	
70	3-351-338-11	(WHITE)....KNOB (VOL)	
70	3-351-338-21	(RED)....KNOB (VOL)	
70	3-351-338-31	(BLACK)....KNOB (VOL)	

Note:

Ref.No	Part
71	3-35
71	3-35
71	3-35
72	3-35
73	3-35
74	3-35
75	3-35
76	3-35
76	3-35
76	3-35
901	1-53
902	*1-63
903	*A-32
904	*A-32
904	*A-32
ANT1	1-50
CNJ801	⚠1-52
F801	⚠1-53
IC302	8-75
MIC301	1-54
T801	⚠1-45

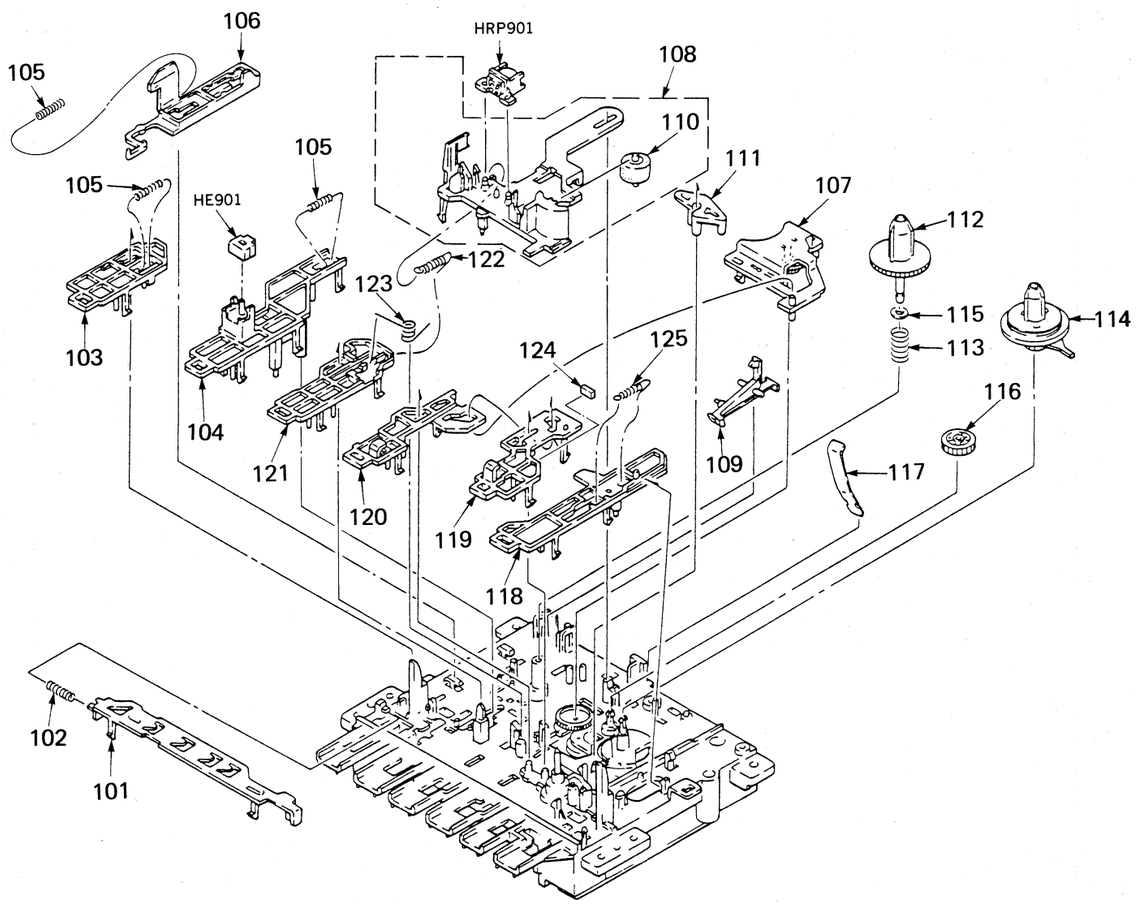


Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Remarks
3X14 TYPE2 N-S
3X10 TYPE2 N-S
ING
3X5 (S)
PHONE
B (FUNCTION)
FUNCTION)
B (FUNCTION)
TYPE2 NON-SLIT
CAPACITOR
ATTERY COIL
B (VOL)
VOL)
B (VOL)

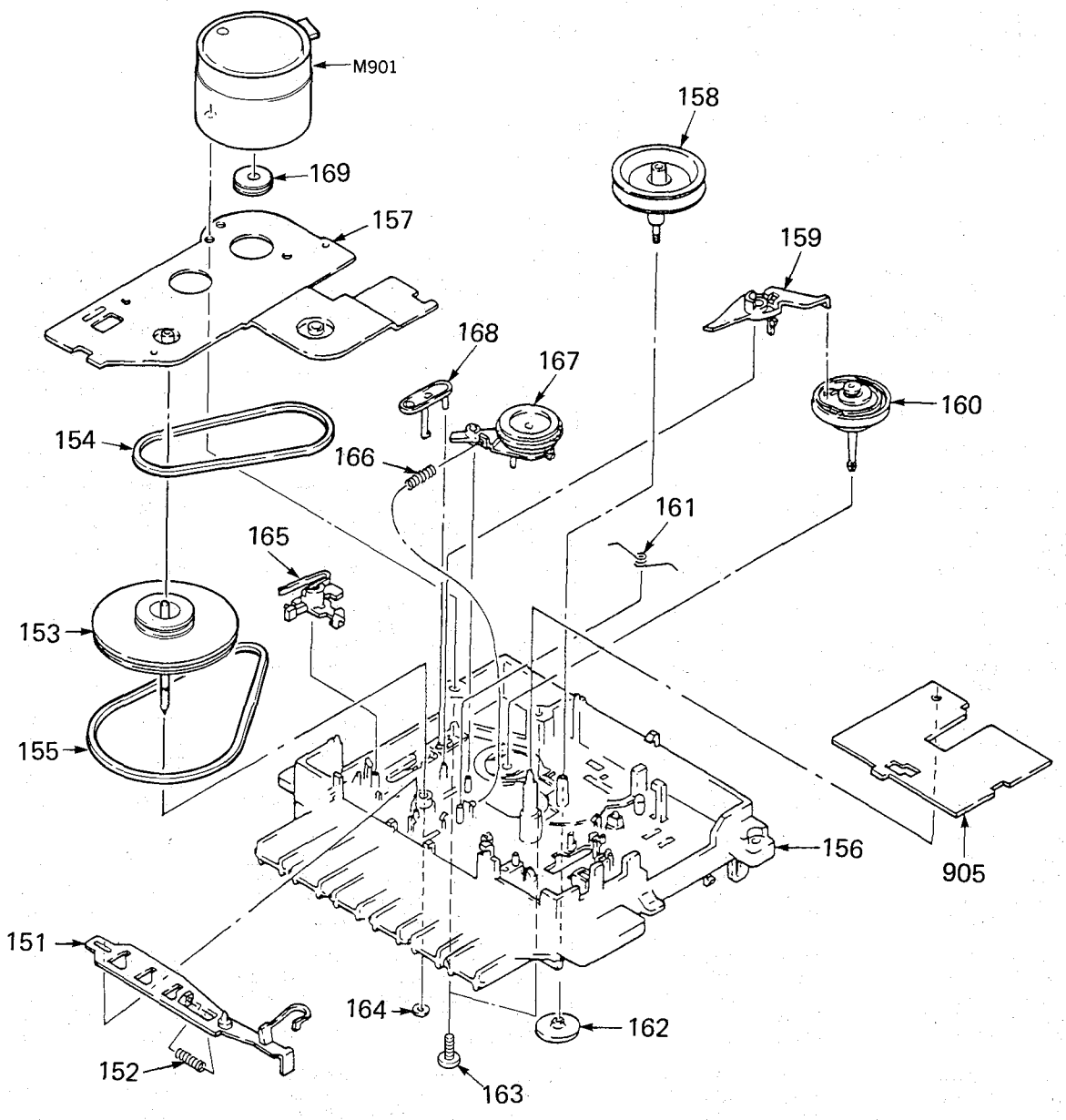
Ref.No	Part No.	Description	Remarks
71	3-351-313-01	(BLACK)....KNOB (ISS)	
71	3-351-313-11	(WHITE)....KNOB (ISS)	
71	3-351-313-21	(RED)....KNOB (ISS)	
72	3-356-168-01	TERMINAL, PLUS	
73	3-356-167-01	SPRING (−), BATTERY COIL	
74	3-356-169-01	TERMINAL, ANTENNA	
75	3-356-170-01	LEVER (REC)	
76	3-356-159-01	(RED)....CABINET (REAR)	
76	3-356-177-81	(BLACK)....CABINET (REAR)	
76	3-356-177-91	(WHITE)....CABINET (REAR)	
901	1-533-217-31	HOLDER, FUSE	
902	*1-634-195-11	PC BOARD, POWER	
903	*A-3261-142-A	MOUNTED PCB, AUDIO	
904	*A-3261-145-A	(IT)....MOUNTED PCB, TUNER	
904	*A-3261-162-A	(AEP)....MOUNTED PCB, TUNER	
ANT1	1-501-378-11	ANTENNA, TELESCOPIC	
CNJ801	⚠1-526-838-11	INLET, AC 2P (AC IN)	
F801	⚠1-532-285-00	FUSE, TIME-LAG (T1.25A)	
IC302	8-759-230-13	IC TA8207K	
MIC301	1-542-092-11	MICROPHONE, ELECTRET CONDENSER	
T801	⚠1-450-013-11	TRANSFORMER, POWER	

5-3. TAPE MECHANISM(1) (MF-204-64)



Ref.No	Part No.	Description	Remarks
101	4-932-695-01	SLIDER (FR), LOCK	
102	4-932-656-01	SPRING, COMPRESSION	
103	4-928-985-01	LEVER, STOP	
104	4-934-511-01	LEVER (S), REC	
105	4-932-648-01	SPRING, COMPRESSION	
106	4-936-206-01	SLIDER (S), EJECT	
107	X-4920-347-1	LEVER (S) ASSY, FR	
108	X-4920-345-1	BASE (S) ASSY, HEAD	110
109	4-928-960-02	CLAW, SAFETY	
110	4-928-962-01	PINCH ROLLER	
111	4-928-982-01	LEVER (C)	
112	4-928-978-01	GEAR (C), SUPPLY REEL	
113	3-343-381-01	SPRING, COMPRESSION	
114	X-4920-350-1	GEAR (S) ASSY, T REEL	
115	4-931-795-11	WASHER	
116	3-343-285-01	GEAR, FF	
117	4-928-957-01	RETAINER, CASSETTE	
118	4-928-994-01	LEVER, PAUSE	
119	4-928-993-01	LEVER, FF	
120	4-928-992-01	LEVER, REW	
121	4-928-991-01	LEVER, PLAY	
122	4-928-972-01	SPRING, TENSION	
123	4-928-973-01	SPRING	
124	9-911-843-XX	SHEET, FF	
125	3-313-372-01	SPRING, TENSION	
HE901	1-543-525-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-543-714-11	HEAD, MAGNETIC (REC/PB)	

5-4. TAPE MECHANISM(2)
(MF-204-64)



Ref.No	Part No.	Description	Remarks
151	4-928-996-01	LEVER, SW	
152	4-932-656-01	SPRING, COMPRESSION	
153	X-4920-349-1	WHEEL (S) ASSY, CAPSTAN	
154	4-928-974-01	BELT (MIDWAY)	
155	4-928-951-01	BELT (CAPSTAN)	
156	X-4920-348-1	CHASSIS (S) ASSY, MECHANICAL	
157	*X-4918-598-1	PLATE ASSY, GROUND	
158	X-4918-580-1	PULLEY ASSY, FR	
159	4-928-986-01	LEVER (S), SHUT-OFF	
160	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
161	4-928-958-01	SPRING, FR RETURN	

Ref.No	Part No.	Description	Remarks
162	4-928-967-01	GEAR (C), MIDWAY	
163	7-621-775-20	SCREW +B 2.6X5	
164	3-343-358-01	RING, RETAINING	
165	4-928-987-01	LEVER (T), SHUT-OFF	
166	4-932-655-01	SPRING, COMPRESSION	
167	X-4920-346-1	LEVER (S) ASSY, IDLER	
168	4-928-961-01	PLATE, PAUSE LOCK	
169	3-343-255-01	PULLEY (P), MOTOR	
905	*1-634-196-11	PC BOARD, SWITCH (A)	
M901	1-541-625-11	MOTOR, DC	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set *such as a stereophonic machine, only typical* circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- IT: Italian model

Ref.No	Part No.	Description			
901	1-533-217-31	HOLDER, FUSE			
902	*1-634-195-11	PC BOARD, POWER			
903	*A-3261-142-A	MOUNTED PCB, AUDIO			
904	*A-3261-145-A	(IT)....MOUNTED PCB, TUNER			
904	*A-3261-162-A	(AEP)....MOUNTED PCB, TUNER			
905	*1-634-196-11	PC BOARD, SWITCH (A)			
ANT1	1-501-378-11	ANTENNA, TELESCOPIC			
		CAPACITOR			
C1	1-162-286-31	CERAMIC	220PF	10%	50V
C3	1-164-096-11	CERAMIC	0.01MF		50V
C4	1-123-875-11	ELECT	10MF	20%	50V
C5	1-164-096-11	CERAMIC	0.01MF		50V
C6	1-164-039-11	CERAMIC	3PF	0.25PF	50V
C7	1-164-056-11	CERAMIC	27PF	5%	50V
C8	1-102-961-00	CERAMIC	27PF	5%	50V
C9	1-102-946-00	(IT)....CERAMIC	9PF	0.5PF	50V
C9	1-102-947-00	(AEP)....CERAMIC	10PF	0.5PF	50V
C10	1-164-012-11	CERAMIC	3PF	0.25PF	50V
C11	1-164-096-11	CERAMIC	0.01MF		50V
C12	1-162-282-31	CERAMIC	100PF	10%	50V
C15	1-124-927-11	ELECT	4.7MF	20%	50V
C16	1-124-791-11	ELECT	1MF	20%	50V
C17	1-124-446-11	ELECT	47MF	20%	10V
C18	1-124-443-00	ELECT	100MF	20%	10V
C19	1-164-096-11	CERAMIC	0.01MF		50V
C20	1-124-791-11	ELECT	1MF	20%	50V
C21	1-124-925-11	ELECT	2.2MF	20%	50V
C22	1-124-443-00	ELECT	100MF	20%	10V
C23	1-124-902-00	ELECT	0.47MF	20%	50V
C24	1-124-927-11	ELECT	4.7MF	20%	50V
C25	1-124-463-00	ELECT	0.1MF	20%	50V
C27	1-161-053-00	CERAMIC	0.015MF	10%	16V
C28	1-161-053-00	CERAMIC	0.015MF	10%	16V
C31	1-162-282-31	CERAMIC	100PF	10%	50V
C32	1-162-282-31	CERAMIC	100PF	10%	50V
C33	1-162-195-31	(IT)....CERAMIC	4.7PF	10%	50V
C33	1-162-196-31	(AEP)....CERAMIC	5.6PF	10%	50V
C34	1-162-282-31	CERAMIC	100PF	10%	50V
C35	1-162-282-31	CERAMIC	100PF	10%	50V
C101	1-124-791-11	ELECT	1MF	20%	50V
C102	1-163-209-00	CERAMIC MELF	0.0015MF	30%	16V
C103	1-124-902-00	ELECT	0.47MF	20%	50V
C104	1-163-213-00	CERAMIC MELF	0.0022MF	20%	16V
C105	1-163-189-00	CERAMIC MELF	220PF	10%	50V
C106	1-124-963-11	ELECT	33MF	20%	16V
C107	1-162-843-11	CERAMIC	0.022MF	10%	16V
C108	1-124-463-00	ELECT	0.1MF	20%	50V
C109	1-163-213-00	CERAMIC MELF	0.0022MF	20%	16V
C110	1-162-843-11	CERAMIC	0.022MF	10%	16V
C112	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C113	1-124-443-00	ELECT	100MF	20%	10V
C114	1-126-233-11	ELECT	22MF	20%	25V
C115	1-130-497-00	MYLAR	0.15MF	5%	50V

Ref.No	Part No.	Description			
C116	1-124-472-11	ELECT	470MF	20%	6.3V
C201	1-124-791-11	ELECT	1MF	20%	50V
C202	1-163-209-00	CERAMIC MELF	0.0015MF	30%	16V
C203	1-124-902-00	ELECT	0.47MF	20%	50V
C204	1-163-213-00	CERAMIC MELF	0.0022MF	20%	16V
C205	1-163-189-00	CERAMIC MELF	220PF	10%	50V
C206	1-124-963-11	ELECT	33MF	20%	16V
C207	1-162-843-11	CERAMIC	0.022MF	10%	16V
C208	1-124-463-00	ELECT	0.1MF	20%	50V
C209	1-163-213-00	CERAMIC MELF	0.0022MF	20%	16V
C210	1-162-843-11	CERAMIC	0.022MF	10%	16V
C212	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C213	1-124-443-00	ELECT	100MF	20%	10V
C214	1-126-233-11	ELECT	22MF	20%	25V
C215	1-130-497-00	MYLAR	0.15MF	5%	50V
C216	1-124-472-11	ELECT	470MF	20%	6.3V
C301	1-163-063-00	CERAMIC MELF	0.022MF		25V
C302	1-123-875-11	ELECT	10MF	20%	50V
C303	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C304	1-124-963-11	ELECT	33MF	20%	16V
C305	1-124-120-11	ELECT	220MF	20%	16V
C306	1-126-233-11	ELECT	22MF	20%	25V
C309	1-124-120-11	ELECT	220MF	20%	16V
C311	1-124-556-11	ELECT	2200MF	20%	16V
C312	1-163-063-00	CERAMIC MELF	0.022MF		25V
C315	1-124-443-00	ELECT	100MF	20%	10V
C316	1-163-063-00	CERAMIC MELF	0.022MF		25V
C317	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C318	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C341	1-124-446-11	ELECT	47MF	20%	10V
C342	1-130-481-00	MYLAR	0.0068MF	5%	50V
C343	1-163-209-00	CERAMIC MELF	0.0015MF	30%	16V
C344	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C346	1-126-101-11	ELECT	100MF	20%	16V
C801	1-101-005-00	CERAMIC	0.022MF		50V
C802	1-101-005-00	CERAMIC	0.022MF		50V
C803	1-101-005-00	CERAMIC	0.022MF		50V
C804	1-101-005-00	CERAMIC	0.022MF		50V
CF1, CF3	1-567-166-00	FILTER, CERAMIC			
CF2	1-527-870-00	FILTER			
CNJ5	*1-563-470-11	HOUSING, CONNECTOR 2P			
CNJ21	*1-568-272-11	SOCKET, CONNECTOR 6P			
CNJ801	⚠1-526-838-11	INLET, AC 2P (∩/ AC IN)			
CNP1	*1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
CNP2	*1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CNP3	*1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
CNP4	*1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CT1-4, CV1-4	1-151-615-11	CAP, VARIABLE			
D301	8-719-918-76	DIODE GL-3PR9			
D303	8-719-911-19	DIODE 1SS119			
D304	8-719-911-19	DIODE 1SS119			

Ref.No	Part No.	Description
D801	8-719-200-02	DIODE 10E2
D802	8-719-200-02	DIODE 10E2
D803	8-719-200-02	DIODE 10E2
D804	8-719-200-02	DIODE 10E2
F801	⚠1-532-285-00	FUSE, TIME-LAG (T1.25A)
FL1	1-236-022-11	FILTER, BAND PASS
HE901	1-543-525-11	HEAD, MAGNETIC (ERASE)
HRP901	1-543-714-11	HEAD, MAGNETIC (REC/PB)
IC1	8-752-035-68	IC CXA1238S
IC301	8-759-978-54	IC BA3420AL
IC302	8-759-230-13	IC TA8207K
J301	1-566-891-11	JACK (PHONO)
KH3	*1-565-386-11	HOLDER, CABLE 5P
KH801	*1-565-384-11	HOLDER, CABLE 3P
L1	*1-142-180-11	(IT)....CAIL, AIR-CORE (RF)
L1	1-420-855-00	(AEP)....CAIL, FM ANT
L2	1-459-815-11	COIL (WITH CORE)
L3	1-402-158-11	ANTENNA, FERRITE-ROD (MW)
L4	1-406-040-00	COIL (OSC)
M901	1-541-625-11	MOTOR, DC
MIC301	1-542-092-11	MICROPHONE, ELECTRET CONDENSER
Q2	8-729-904-36	TRANSISTOR DTC114YS
Q301	8-729-281-53	TRANSISTOR 2SC1815-GR
Q302	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q303	8-729-100-13	TRANSISTOR 2SC2001-K2

RESISTOR

R1	1-249-413-11	CARBON	470	5%	1/4W
R2	1-249-405-11	CARBON	100	5%	1/4W
R3	1-249-421-11	CARBON	2.2K	5%	1/4W
R5	1-249-423-11	CARBON	3.3K	5%	1/4W
R6	1-249-441-11	CARBON	100K	5%	1/4W
R7	1-249-415-11	CARBON	680	5%	1/4W
R9	1-249-441-11	CARBON	100K	5%	1/4W
R10	1-249-397-11	CARBON	22	5%	1/4W
R11	1-249-427-11	CARBON	6.8K	5%	1/4W
R12	1-249-427-11	CARBON	6.8K	5%	1/4W
R13	1-249-405-11	CARBON	100	5%	1/4W
R14	1-249-429-11	CARBON	10K	5%	1/4W
R15	1-247-887-00	CARBON	220K	5%	1/4W
R16	1-247-887-00	CARBON	220K	5%	1/4W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W
R21	1-249-411-11	CARBON	330	5%	1/4W
R29	1-249-429-11	CARBON	10K	5%	1/4W
R101	1-249-429-11	CARBON MELF	10K	5%	1/8W
R102	1-249-419-11	CARBON MELF	1.5K	5%	1/8W
R103	1-215-446-00	CARBON MELF	11K	5%	1/8W
R104	1-249-401-11	CARBON MELF	47	5%	1/8W
R105	1-249-426-11	CARBON MELF	5.6K	5%	1/8W
R106	1-249-429-11	CARBON MELF	10K	5%	1/8W
R107	1-249-406-11	CARBON MELF	120	5%	1/8W
R109	1-249-405-11	CARBON MELF	100	5%	1/8W
R110	1-249-417-11	CARBON MELF	1K	5%	1/8W
R201	1-249-429-11	CARBON MELF	10K	5%	1/8W
R202	1-249-419-11	CARBON MELF	1.5K	5%	1/8W
R203	1-215-446-00	CARBON MELF	11K	5%	1/8W
R204	1-249-401-11	CARBON MELF	47	5%	1/8W
R205	1-249-426-11	CARBON MELF	5.6K	5%	1/8W
R206	1-249-429-11	CARBON MELF	10K	5%	1/8W
R207	1-249-406-11	CARBON MELF	120	5%	1/8W

Ref.No	Part No.	Description			
R209	1-249-405-11	CARBON MELF	100	5%	1/8W
R210	1-249-417-11	CARBON MELF	1K	5%	1/8W
R301	1-249-433-11	CARBON MELF	22K	5%	1/8W
R302	1-249-417-11	CARBON MELF	1K	5%	1/8W
R303	1-249-421-11	CARBON MELF	2.2K	5%	1/8W
R304	1-215-394-00	CARBON MELF	75	5%	1/8W
R306	1-249-432-11	CARBON MELF	18K	5%	1/8W
R307	1-249-429-11	CARBON MELF	10K	5%	1/8W
R308	1-215-394-00	CARBON MELF	75	5%	1/8W
R310	1-249-416-11	CARBON MELF	820	5%	1/8W
R311	1-249-410-11	CARBON MELF	270	5%	1/8W
R313	1-249-405-11	CARBON MELF	100	5%	1/8W
R321	1-249-434-11	CARBON MELF	27K	5%	1/8W
R341	1-249-399-11	CARBON MELF	33	5%	1/8W
R342	1-249-435-11	CARBON MELF	33K	5%	1/8W
R343	1-249-389-11	CARBON MELF	4.7	5%	1/8W
R344	1-249-425-11	CARBON MELF	4.7K	5%	1/8W
RV1	1-238-601-11	RES, ADJ, CARBON 22K			
RV301	1-238-431-11	RES, VAR, CARBON 20K/20K (TONE)			
RV302	1-238-430-11	RES, VAR, CARBON 20K/20K (VOLUME)			
S301	1-571-472-11	SWITCH, SLIDE (REC/PB)			
S302	1-570-558-11	SWITCH, LEVER SLIDE (FUNCTION)			
S303	1-554-222-00	SWITCH, SLIDE (FM MODE/ISS)			
S601	1-571-330-21	SWITCH, LEAF (POWER)			
SP901	1-544-154-11	SPEAKER			
SP902	1-544-154-11	SPEAKER			
T1	1-404-355-00	TRANSFORMER, IF			
T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR			
T801	⚠1-450-013-11	TRANSFORMER, POWER			

ACCESSORIES & PACKING MATERIALS

* *

⚠1-555-234-00	CORD, POWER
3-752-129-41	(AEP)....MANUAL, INSTRUCTION (DUTCH, SWEDISH, SPANISH, PORTUGUESE)
3-752-129-51	(IT)....MANUAL, INSTRUCTION (ITALIAN, ENGLISH)
*3-357-552-01	INDIVIDUAL CARTON
*3-357-555-01	CUSHION (L)
*3-357-589-01	CUSHION (R)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.